

Response to First Office Action  
Docket No. 028.0371.US.UTL

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

- 1           1.       (original): A method for converting directly synthesis gas to  
2 hydrocarbons with high diesel distillates content through Fischer-Tropsch  
3 process, wherein:  
4           (1) the synthetic fuels with diesel distillates as primary products are  
5 produced through one-step synthesis technique from synthesis gas;  
6           (2) synthesis gas is composed of hydrogen and carbon monoxide with the  
7 mole ratio of hydrogen to carbon monoxide within the range of 1 to 4;  
8           (3) activated carbon supported cobalt based catalysts were employed;  
9           (4) synthesis conditions comprise reaction temperature within the range of  
10 120 to 400°C, reaction pressure within the range of 0.5 to 10.0 MPa, volume  
11 hourly space velocity of mixture of hydrogen and carbon monoxide within the  
12 range of 100 to 5000.
- 1           2.       (original): A method of claim 1, wherein said Fischer-Tropsch  
2 process is a non-shifting Fischer-Tropsch process over an activated carbon  
3 supported cobalt based catalyst.
- 1           3.       (original): A method of claim 1, wherein the diesel distillates  
2 useful as a diesel fuel heavier than gasoline or as a blending component for a  
3 distillate fuel comprising: 180 to 380°C fraction directly synthesized from  
4 Fischer-Tropsch process and containing at least 95 wt % paraffins with an iso to  
5 normal ratio of about 0.03 to 0.3, <50 ppm (wt) of sulfur and nitrogen, less than  
6 about 2 wt % unsaturates, and about 0.001 to less than 0.3 wt % oxygen.
- 1           4.       (original): The method of claim 3, wherein the oxygen is present  
2 primarily as C<sub>12</sub> + linear alcohols.

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1           5.       (original): The method of claim 3, wherein the diesel fuels are  
2       characterized by a cetane number of at least 60 to 70.

1           6.       (original): The method of claim 3, wherein the content of nitrogen  
2       and sulfur in fuels is less than or equal to 15 ppm (wt).

1           7.       (original): The method of claim 6, wherein the content of nitrogen  
2       and sulfur is less than or equal to 10 ppm (wt).

1           Claims 8-12 (cancelled).